Dell™ E170S/E190S Flat Panel Monitor User's Guide

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Solving Problems

Appendix

Notes, Notices, and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

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Model E170Sb/E170Sc/E190Sb/E190Sf

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About Your Monitor

Dell™ E170S/E190S Flat Panel Monitor User's Guide

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- LCD Monitor Quality & Pixel Policy
- Maintenance Guidelines

Package Contents

Your monitor ships with the components shown below. Ensure that you have received all the components and contact Dell if something is missing.

NOTE: Some items may be optional and may not ship with your Monitor. Some features or media may not be available in certain countries.

	• Monitor with stand
	• Power Cable
	• VGA Cable
	• *Drivers and Documentation* media • *Quick Setup Guide* • Safety Information

Product Features

The **E170S/E190S** flat panel display has an active matrix, thin-film transistor (TFT), and liquid crystal display (LCD). The monitor features include:

■ **E170S:** 17-inch (432.7 mm) viewable area display. 1280 x 1024 resolution, plus full-screen support for lower resolutions.

■ **E190S:** 19-inch (482.2 mm) viewable area display. 1280 x 1024 resolution, plus full-screen support for lower resolutions.

■ Wide viewing angle to allow viewing from a sitting or standing position, or while moving from side to side.

■ Tilt adjustment capability.

■ Removable pedestal and Video Electronics Standards Association (VESA) 100 mm mounting holes for flexible mounting solutions.

■ Plug and play capability if supported by your system.

■ On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.

■ Software and documentation CD which includes an information file (INF), Image Color Matching File (ICM), and product documentation.

■ Energy Saver feature for Energy Star compliance.

■ Security lock slot.

■ EPEAT Gold Rating.

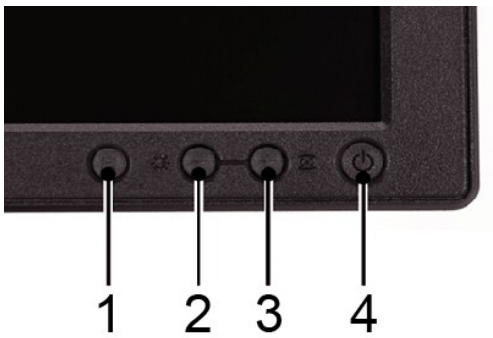
■ Halogen Reduced.

■ Asset Management.

Identifying Parts and Features

Front View

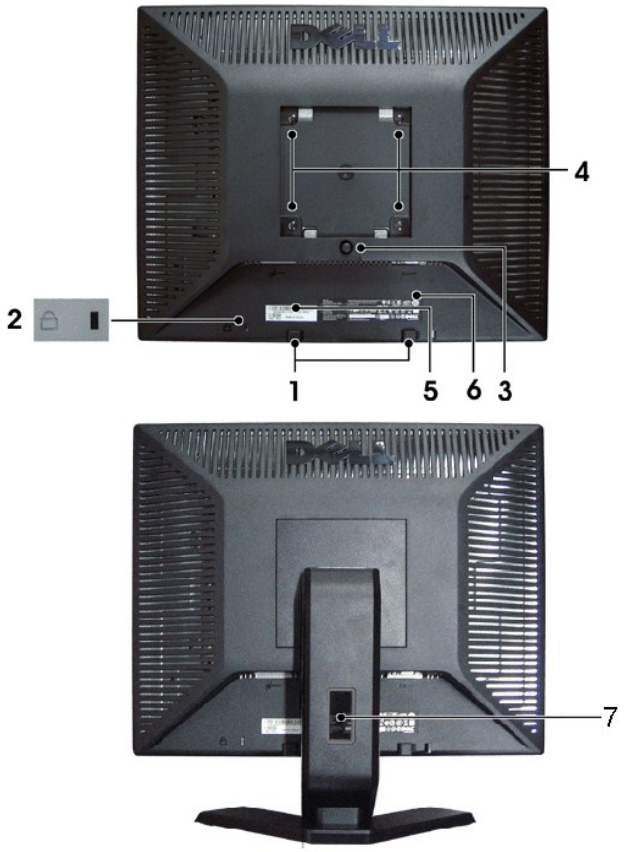
Front View



Front panel controls

Label	Description
1	OSD menu button
2	Down (-) button/Brightness & Contrast
3	Up (+) button/Auto-Adjust
4	Power On/Off button with LED indicator

Back View



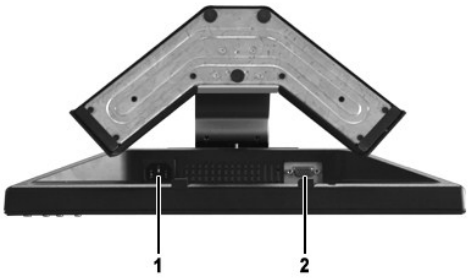
Back view

	Label	Description / Use
1	Dell Soundbar mounting brackets	Attach the optional Dell Soundbar.
2	Security lock slot	Attach a lock to secure your monitor.
3	Stand removal button	Press to release the stand.
4	VESA mounting holes (100 mm - behind attached stand)	Use to mount monitor.
5	Barcode serial number label	Refer to this label if you need to contact Dell for technical support.
6	Regulatory rating label	List the regulatory approvals.
7	Cable management slot	Help organize cables by passing them through the holder.

Side View

Right side **Left side**

Bottom View



Bottom view

Label	Description
1	AC power cord connector
2	VGA connector

Monitor Specifications

Power Management Modes

If you have VESA's DPMS™ compliance display card or software installed in your computer, the monitor can automatically reduce its power consumption when not in use. This is referred to as Power Save Mode. If input from a keyboard, mouse or other input devices is detected by the computer, the monitor will automatically "wake up". The following table shows the power consumption and signaling of this automatic power-saving feature:

E170S

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Green	25 W (maximum) 17 W (typical)
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 1 W

Switch off	-	-	-	Off	Less than 0.5 W

E190S

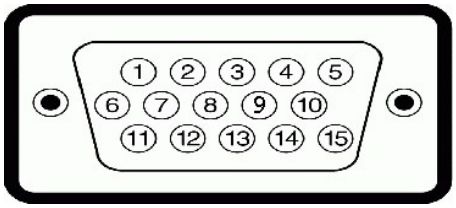
VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Green	25 W (maximum) 19 W (typical)
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 1 W
Switch off	-	-	-	Off	Less than 0.5 W

NOTE: This monitor is ENERGY STAR®-compliant.

NOTE: Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.

Pin Assignments

VGA Connector



Pin Number	15-pin Side of the Connected Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	Computer 5V/3.3V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

Flat Panel Specifications

Model	E170S	E190S
Screen type	Active matrix - TFT LCD	Active matrix - TFT LCD

Panel type	TN	TN
Screen dimensions	17 inches (17-inch viewable image size)	19 inches (19-inch viewable image size)
Preset display area: Horizontal Vertical	 337.9 mm (13.3 inches) 270.3 mm (10.6 inches)	 376.3 mm (14.8 inches) 301.1 mm (11.8 inches)
Pixel pitch	0.264 mm	0.294 mm
Viewing angle	160° (vertical) typical, 160° (horizontal) typical	160° (vertical) typical, 160° (horizontal) typical
Luminance output	250 CD/m² (typical)	250 CD/m² (typical)
Contrast ratio	800 to 1 (typical)	800 to 1 (typical)
Faceplate coating	Antiglare with hard-coating 3H	Antiglare with hard-coating 3H
Backlight	2 CCFLs backlight	2 CCFLs backlight
Response Time	5 ms typical	5 ms typical
Color Depth	16.7 mil colors	16.7 mil colors
Color Gamut	85 %*	85 %*

* E170S/E190S Color Gamut (Typical) is based on CIE1976 (85%) and CIE1931 (72%).

Resolution

Model	**E170S/E190S**
Horizontal scan range	30 kHz to 81 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz (automatic)
Maximum preset resolution	1280 x 1024 at 60 Hz

Preset Display Modes

E170S/E190S

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VGA, 720 x 400	31.5	70.1	28.3	-/+
VGA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+

Electrical

Model	**E170S/E190S**
Video input signals	Analog RGB, 0.7 Volts +/- 5%, 75 ohm input impedance
Synchronization input signals	separate horizontal and vertical, 3.3V Cmos or 5V TTL level, positive or negative sync.
AC input voltage/frequency/current	100 to 240 VAC / 50-60 Hz / 1.6 A (RMS) Max.
Inrush iso surge current	120 V: 40 A (Max.) 240 V: 60 A (Max.)

Physical Characteristics

Model	E170S	E190S
Connector type	• D-sub: blue connector	• D-sub: blue connector
Signal cable type	• D-sub: Detachable, Analog, 15 pin, shipped attached to the monitor	• D-sub: Detachable, Analog, 15 pin, shipped attached to the monitor
Dimensions (with stand)		
Height	380.6 mm (14.98 inches)	411.2 mm (16.19 inches)
Width	374.5 mm (14.74 inches)	412.7 mm(16.25 inches)
Depth	136.9 mm (5.39 inches)	144.4 mm (5.67 inches)
Dimensions (without stand)		
Height	307.0 mm (12.09 inches)	337.7 mm (13.30 inches)
Width	374.5 mm (14.74 inches)	412.7 mm (16.25 inches)
Depth	59.0 mm (2.32 inches)	59.0 mm (2.32 inches)
Stand dimensions		
Height	297.15 mm (11.70 inches)	312.5 mm (12.30 inches)
Width	275 mm (10.83 inches)	291.6 mm (11.48 inches)
Depth	136.9 mm (5.39 inches)	144.4 mm (5.67 inches)
Weight		
Weight with packaging	5.21 kg (11.5 lb)	6.27 kg (13.79 lb)
Weight with stand assembly and cables	4.31 kg (9.5 lb)	5.06 kg (11.13 lb)
Weight without stand assembly (for wall mount or VESA mount considerations - no cables)	3.04 kg (6.7 lb)	3.94 kg (8.67 lb)
Weight of stand assembly	0.91 kg (2.01 lb)	0.97 kg (2.13 lb)

Environmental

Model	E170S	E190S
Temperature		
Operating	5° to 35° C (41° to 95°F)	5° to 35° C (41° to 95°F)
Non-operating	Storage: -20° to 60° C (-4° to 140° F) Shipping: -20° to 60° C (-4° to 140° F)	Storage: -20° to 60° C (-4° to 140° F) Shipping: -20° to 60° C (-4° to 140° F)
Humidity		
Operating	10% to 80% (non-condensing)	10% to 80% (non-condensing)
Non-operating	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90% (non-condensing)	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90% (non-condensing)
Altitude		
Operating	3,048 m (12,000 ft) max	3,048 m (12,000 ft) max
Non-operating	9,144 m (40,000 ft) max	9,144 m (40,000 ft) max
Thermal dissipation	86.2 BTU/hour (maximum) 58.6 BTU/hour (typical)	86.2 BTU/hour (maximum) 65.5 BTU/hour (typical)

Plug and Play Capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so that the system can configure itself and optimize the monitor settings. If required,

the user can select different settings, but in most cases monitor installation is automatic.

LCD Monitor Quality & Pixel Policy

During the LCD Monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state. The visible result is a fixed pixel that appears as an extremely tiny dark or bright discolored spot. When the pixel remains permanently lit, it is known as a "bright dot." When the pixel remains black, it is known as a "dark dot."
In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A display with 1 to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: **support.dell.com**.

Maintenance Guidelines

Caring for Your Monitor

CAUTION: Read and follow the Safety Instructions before cleaning the monitor.

CAUTION: Before cleaning the monitor, unplug the monitor from the electrical outlet.

For best practices, follow the instructions in the list below while unpacking, cleaning, or handling your monitor:

- To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
- Use a lightly-dampened, warm cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor.
- If you notice a white powder when you unpack your monitor, wipe it off with a cloth.
- Handle your monitor with care as dark-colored monitors may scratch and show white scuff marks more than lighter-colored monitors.
- To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

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Appendix

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- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell

CAUTION: Safety Instructions

CAUTION: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the *Safety Information* that ships with your monitor.

FCC Notice (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at www.dell.com\regulatory_compliance.

Contacting Dell

For customers in the United States, call 800-WWW-DELL (800-999-3355).

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

1. Visit **support.dell.com**.
2. Verify your country or region in the **Choose A Country/Region** drop-down menu at the bottom of the page.
3. Click **Contact Us** on the left side of the page.
4. Select the appropriate service or support link based on your need.
5. Choose the method of contacting Dell that is convenient for you.

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Setting Up Your Monitor

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If you have a Dell™ desktop or a Dell™ portable computer with internet access

1. Go to **http://support.dell.com**, enter your service tag, and download the latest driver for your graphics card.

2. After installing the drivers for your Graphics Adapter, attempt to set the resolution to **1280x1024** again.

NOTE: If you are unable to set the resolution to 1280x1024 , please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

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Setting Up Your Monitor

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If you have a non Dell™ desktop, portable computer, or graphics card

1. Right-click on the desktop and click **Properties**.

2. Select the **Settings** tab.

3. Select **Advanced**.

4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).

5. Please refer to the graphics card provider website for updated driver (for example, http://www.ATI.com OR http://www.NVIDIA.com).

6. After installing the drivers for your Graphics Adapter, attempt to set the resolution to **1280x1024** again.

NOTE: If you are unable to set the resolution to 1280x1024 , please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1280x1024 .

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Operating the Monitor

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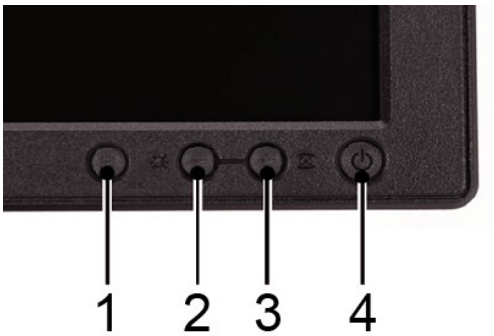
- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Maximum Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt

Using the Front Panel

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.

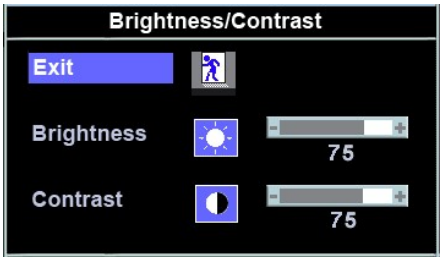


The following table describes the front panel buttons:

A	**MENU**	The 'MENU' button is used to open the on-screen display (OSD), select function icons, exit from menus and sub-menus, and to ex Accessing the Menu System.
B	**Brightness/Contrast Hot Key**	Use this button for direct access to the 'Brightness' and 'Contrast' control menu.
B C	**- and + buttons**	Use these buttons to adjust (decrease/increase ranges) items in the OSD. **NOTE**: You can activate automatic scroll feature by pressing and holding either + or - button.
C	**Auto Adjust**	Use this button to activate automatic setup and adjustment. The following dialog will appear on screen as the monitor self-adjus input: Auto Adjustment in Progress... Auto Adjustment button allows the monitor to self-adjust to the incoming video signal. After using 'Auto Adjustment', you can monitor by using the 'Pixel Clock' and 'Phase' controls in the OSD. **NOTE**: Auto Adjust will not occur if you press the button while there are no active video input signals, or attached cables.
D	**Power Button &**	The green LED indicates the monitor is on and fully functional. An amber LED indicates DPMS power save mode. The Power button turns the monitor on and off.

	Indicator	

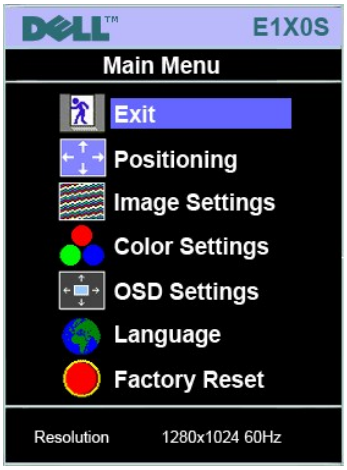
Direct-Access Functions

Function	Adjustment Method
Auto adjustment	Use this button to activate automatic setup and adjustment. The following dialog will appear on screen as the monitor self-adjusts to the current input: Auto Adjustment in Progress... Auto Adjustment button allows the monitor to self-adjust to the incoming video signal. After using 'Auto Adjustment', you can further tune your monitor by using the 'Pixel Clock' and 'Phase' controls in the OSD. **NOTE**: Auto Adjust will not occur if you press the button while there are no active video input signals, or attached cables
Brightness / Contrast 	With the menu off, press the button to display the 'Brightness' and 'Contrast' adjustment menu. The 'Brightness' function adjusts the luminance of the flat panel. Adjust 'Brightness' first, then adjust 'Contrast' only if further adjustment is necessary. "+" increase 'brightness' " - "decrease 'brightness' The 'Contrast' function adjusts the degree of difference between darkness and lightness on the display screen. "+" increase the 'contrast' "-" decrease the 'contrast'

Using the On-Screen Display (OSD) Menu

Accessing the Menu System

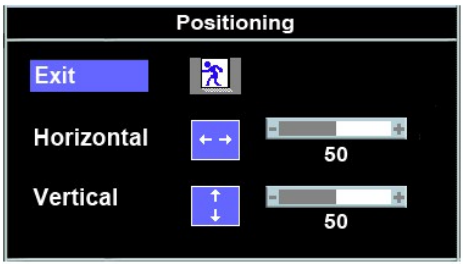
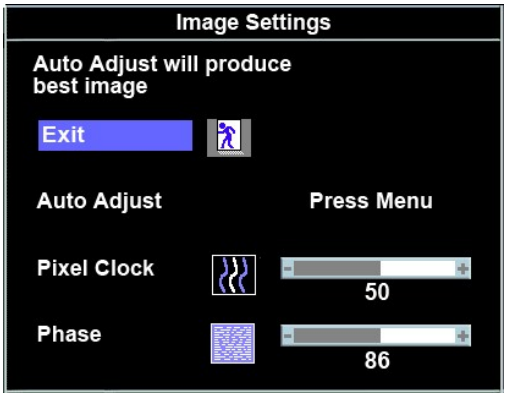
1. With the menu off, press the **MENU** button to open the OSD system and display the main features menu.

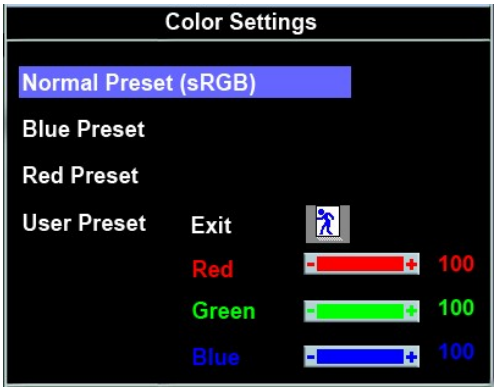
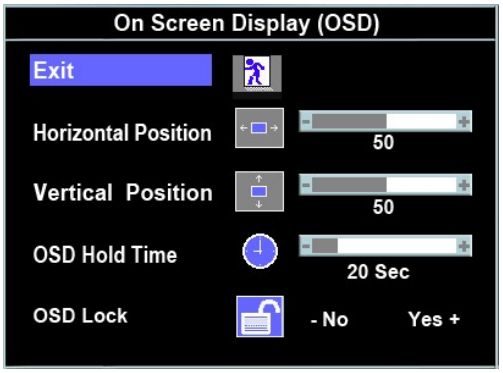


A	Function icons	**B**	Main Menu	**C**	Menu icon
D	Sub-Menu name	**E**	Resolution		

2. Press the - and + buttons to move between the function icons. As you move from one icon to another, the function name is highlighted to reflect the function or group of functions (sub-menus) represented by that icon. See the table below for a complete list of all the functions available for the monitor.
3. Press the **MENU** button once to activate the highlighted function. Press -/+ to select the desired parameter, press menu to enter the slidebar then use the - and + buttons, according to the indicators on the menu, to make your changes.
4. Press the **MENU** button once to return to the main menu to select another function or press the **MENU** button two or three times to exit from the OSD.

Icon	Menu Name and Sub-menus	Description

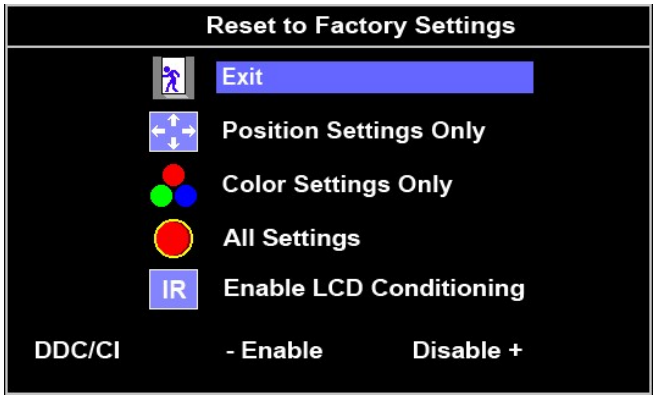
	EXIT	This is used to exit out of the Main Menu.
	Positioning: **Horizontal** **Vertical**	'Positioning' moves the viewing area around on the monitor screen. When making changes to either the **Horizontal** or **Vertical** settings, no changes occur to the size of the viewing area; the image gets shifted based on what you select. Minimum is '0' (-). Maximum is '100' (+). 
	Image settings:	
	Auto Adjust	Even though your computer system can recognize your new flat panel monitor on startup, the 'Auto Adjustment' function will optimize the display settings for use with your particular setup. **NOTE**: In most cases, 'Auto Adjust' produces the best image for your configuration; you can directly access this function via Auto Adjustment hotkey.
	Pixel Clock	The **Phase** and **Pixel Clock** adjustments allow you to more closely adjust your monitor to your preference. Select **Image Settings** in the main OSD to access these settings. Use the - and + buttons to adjust interference. Minimum: 0 ~ Maximum: 100
	Phase	If satisfactory results are not obtained using the **Phase** adjustment, use the **Pixel Clock** adjustment and then use **Phase** again.  **NOTE**: This function may change the width of the display image. Use the 'Horizontal' function of the 'Position' menu to center the display image on the screen.

	Color Settings:	Adjusts the color temperature and saturation. 
	Normal Preset (sRGB)	Selected to obtain the default (factory) color settings.
	Blue Preset	This color setting gives a bluish tint and is used for text-based applications such as spreadsheets, programming, text editors, and so on.
	Red Preset	This color setting gives a reddish tint and is used for color-intensive applications such as photograph image editing, multimedia, movies, and so on.
	User Preset	Use the +/- buttons to increase or decrease each of the three colors (R, G, B) independently, in single digit increments, from '0' to '100'. **NOTE**: 'Color temperature' is a measure of the 'warmth' of the image colors (red/green/blue). The two available presets ('Blue' and 'Red') favor blue and red accordingly. Select each one to see how each range suits your eye; or utilize the 'User Preset' option to customize the color settings to your exact choice.
	OSD Settings:	Each time the OSD opens, it displays in the same location on the screen. 'OSD Settings' (horizontal/vertical) provides control over this location.
	Horizontal Position	**-** and + buttons move OSD to the left and right.
	Vertical Position	**-** and + buttons move OSD down and up.
	OSD Hold Time:	The OSD stays active for as long as it is in use. 'OSD Hold Time': Sets the length of time the OSD will remain active after the last time you pressed a button. Use the **-** and + buttons to adjust the slider in 5 second increments, from 5 to 60 seconds. **NOTE**: Default 'OSD hold time' is 20 seconds.
	OSD Lock	Controls user access to adjustments. When 'Yes' (+) is selected, no user adjustments are allowed. All buttons, except Menu, are locked. All buttons can be locked or unlocked. Press the 'Menu' button for over 15 seconds to unlock the OSD menu.  **NOTE**: When the OSD is locked, pressing the 'Menu' button will take the user directly to the 'OSD settings' menu, with 'OSD Lock' preselected on entry. Select 'No'(-) to unlock and allow user access to all applicable settings.
	Language:	Language sets the OSD to display in one of eight languages (English, Español, Français, Deutsch, Japanese, Brazilian Portuguese, Russian, Simplified Chinese).

NOTE: The language chosen affects only the language of the OSD. It has no effect on any software running on the computer.

Factory Reset:

Factory Reset returns the settings to the factory preset values for the selected group of functions.



Exit is used to exit out of **Factory Reset** menu.

For **All settings**, all user adjustable settings are reset at one time except **Language settings**.

IR - This feature will help reduce minor cases of image retention.

Enable LCD Conditioning: If an image appears to be stuck on the monitor, select **LCD Conditioning** to help eliminate any image retention. Using the LCD Conditioning feature may take several hours. Severe cases of image retention are known as burn-in, the LCD Conditioning feature does not remove burn-in.

NOTE: Use LCD Conditioning only when you experience a problem with image retention.

Below warning message appears once user select "Enable LCD Conditioning":

This feature will help reduce minor cases of image retention.
Depending on the degree of image retention, the program may take some time to run.
Do you wish to continue?
- No
Yes +

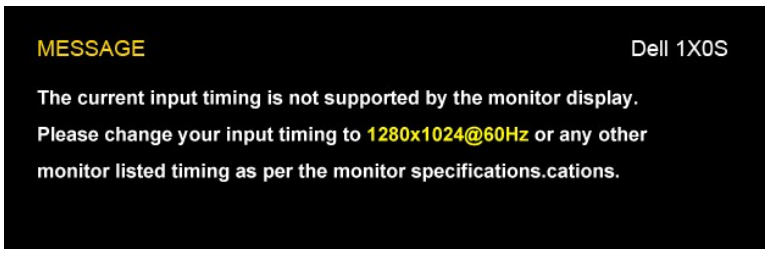
NOTE: Press any button on the monitor to terminate LCD Conditioning at any time.

DDC/CI (Display Data Channel/Command Interface) allows you to adjust the monitor parameters (brightness, color, balance,

		etc.) via software applications on your PC. Select **Disable** to disable this feature. For best user experience and optimum performance of your monitor, keep this feature enabled. **NOTE**: If user select 'disable' for DDC/CI,the warning message will appear on screen.Then user can select Yes or No according to need.

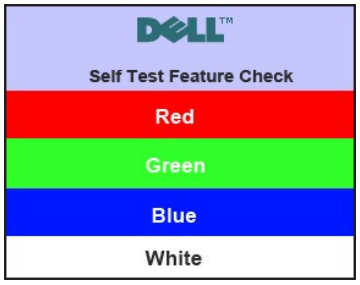
OSD Warning Messages

A warning message may appear on the screen indicating that the monitor is out of sync.



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. Either the signal is too high or too low for the monitor to use. See Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1280 X 1024 @ 60Hz.

NOTE: The floating 'Dell - Self Test Feature Check' dialog appears on the screen if the monitor cannot sense a video signal.



Occasionally, no warning message appears, but the screen is blank. This could also indicate that the monitor is not synchronizing with the computer.

See Troubleshooting for more information.

Setting the Maximum Resolution

To set the maximum resolution for the monitor.

1. Right-click on the desktop and select **Properties**.
2. Select the **Settings** tab.
3. Set the screen resolution to 1280x1024.
4. Click **OK**.

If you do not see 1280x1024 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures.

If you have a Dell desktop or portable computer:

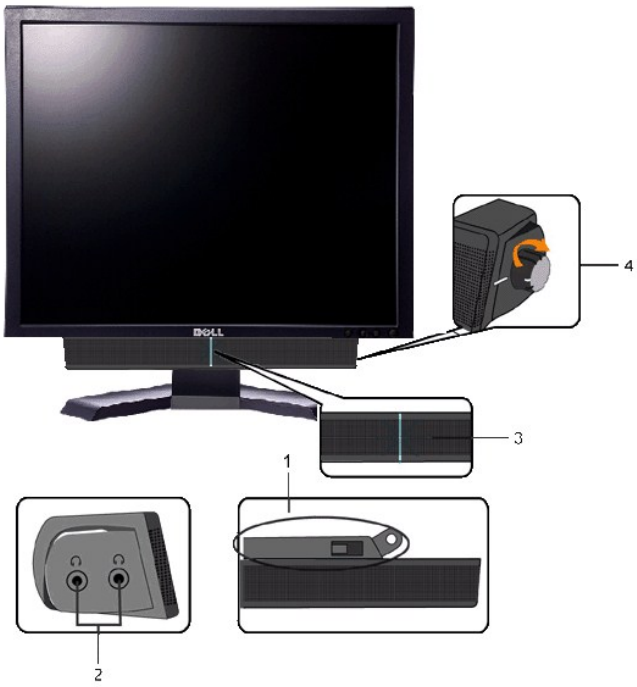
- Go to **support.dell.com**, enter your service tag, and download the latest driver for your graphics card.

If you are using a non-Dell computer (portable or desktop):

- Go to the support site for your computer and download the latest graphic drivers.
- Go to your graphics card website and download the latest graphic drivers.

Using the Dell Soundbar (Optional)

The Dell Soundbar is a stereo two channel system mountable on Dell flat panel displays. The Soundbar has a rotary volume and on/off control to adjust the overall system level, a blue LED for power indication, and two audio headset jacks.



1. Attach mechanism
2. Headphone connectors
3. Power indicator
4. Power/Volume control

Using the Tilt

Tilt

With the built-in pedestal, you can tilt the monitor for the most comfortable viewing angle.

NOTE: The stand is detached when the monitor is shipped from the factory.

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Setting Up Your Monitor

Dell™ E170S/E190S Flat Panel Monitor

Important instructions to set the display resolution to 1280x1024 (Maximum)

For optimal display performance while using the Microsoft Windows® operating systems, set the display resolution to 1280x1024 pixels by performing the following steps:

1. Right-click on the desktop and click **Properties**.

2. Select the **Settings** tab.

3. Move the slider-bar to the right by pressing and holding the left-mouse button and adjust the screen resolution to **1280x1024**.

4. Click **OK**.

If you do not see **1280x1024** as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the provided directions:

1: **If you have a Dell™ desktop or a Dell™ portable computer with internet access.**

2: **If you have a non Dell™ desktop, portable computer, or graphics card.**

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Dell™ E170S/E190S Flat Panel Monitor

- User Guide
- Important instructions to set the display resolution to 1280x1024 (Maximum)

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Model E170Sb/E170Sc/E190Sb/E190Sf

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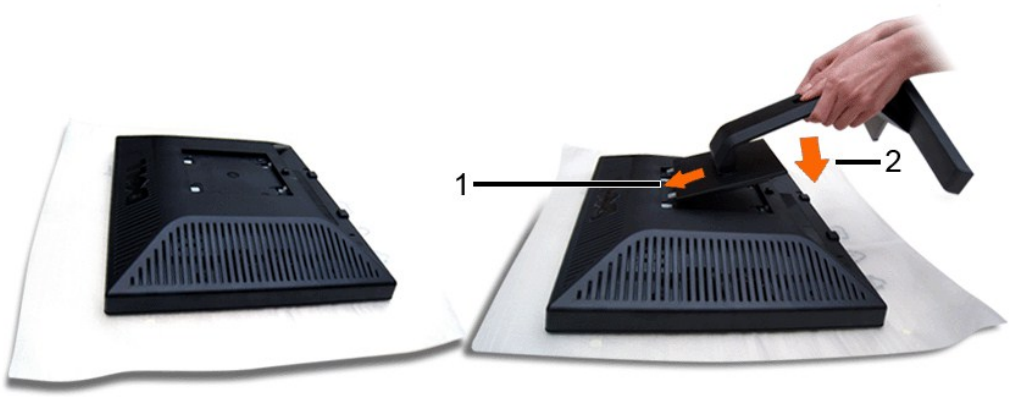
Setting Up the Monitor

Dell™ E170S/E190S Flat Panel Monitor User's Guide

- Attaching the Stand
- Connecting the Monitor
- Organizing Your Cables
- Attaching the Soundbar (Optional)
- Removing the Stand

Attaching the Stand

NOTE: Stand is detached when the monitor is shipped from the factory.



Remove the monitor cover and place the monitor on it.

1. Fit the two tabs on the upper part of the stand to the groove on the back of the monitor.
2. Lower the stand so that the monitor mounting area snaps onto the stand.

Connecting Your Monitor

CAUTION: Before you begin any of the procedures in this section, follow the safety instructions.

To connect your monitor to the computer perform the following steps/instructions:

1. Turn off your computer and disconnect the power cable.
2. Connect the blue (analog VGA) display connector cable to the corresponding video connector on the back of your computer.

Connecting the blue VGA cable

NOTE: The Graphics are used for the purpose of illustration only. Appearance of the the computer may vary.

After you have completed connecting the VGA cable, follow the procedure below to complete your monitor setup:

1. Plug the power cables for your computer and monitor into a nearby outlet.
2. Turn on the monitor and the computer.
   If your monitor displays an image, installation is complete. If it does not display an image, see Solving Problems.

Organizing Your Cables

After attaching all necessary cables to your monitor and computer (see Connecting Your Monitor), use the cable management slot to organize all cables as shown above.

Attaching the Soundbar (Optional)

1. Working from the rear of the monitor, attach the Soundbar by aligning the two slots with the two tabs along the bottom rear of the monitor.
2. Slide the Soundbar to the left until it snaps into place.
3. Connect the Soundbar with the DC power connector.
4. Insert the mini stereo plug from the rear of the Soundbar into the computer's audio output jack.

NOTICE: Do not use with any device other than the Dell Soundbar

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Removing the Stand

After placing the monitor panel on a soft cloth or cushion, press and hold the stand removal button, and then remove the stand.

NOTE: To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a clean surface.

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Solving Problems

Dell™ E170S/E190S Flat Panel Monitor User's Guide

- Self-Test
- Built-in Diagnostics
- Common Problems
- Product-Specific Problems
- Troubleshooting the Dell™ Soundbar (Optional)

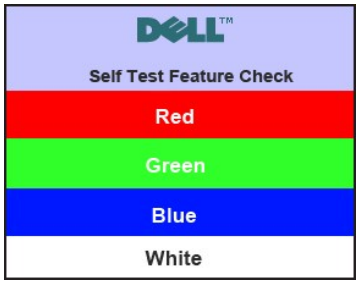
CAUTION: Before you begin any of the procedures in this section, follow the Safety Instructions.

Self-Test

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

1. Turn off both your computer and the monitor.
2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove the Analog (blue connector) cables from the back of computer.
3. Turn on the monitor.

The floating 'Dell™ - Self Test Feature Check' dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains green. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.



4. This box also appears during normal system operation if the video cable becomes disconnected or damaged.
5. Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer system; your monitor is functioning properly.

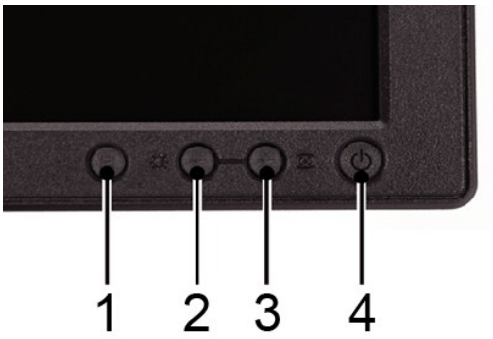
Built-in Diagnostics

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.

NOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in *self-test mode*.

To run the built-in diagnostics:

1. Ensure that the screen is clean (no dust particles on the surface of the screen).
2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
3. On the front panel, press and hold the ***Menu (button 1)*** and ***+ (button 3)*** keys on the front panel, simultaneously for 2 seconds. A gray screen appears.



4. Carefully inspect the screen for abnormalities.
5. Press the ***+ (button 3)*** key on the front panel again. The color of the screen changes to red.
6. Inspect the display for any abnormalities.
7. Repeat steps 5 and 6 to inspect the display in green, blue, and white colored screens.

The test is complete when the white screen appears. To exit, press the ***+ (button 3)*** again.

If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

OSD Warning Messages

For OSD-related issues, see OSD Warning Messages.

Common Problems

The following table contains general information about common monitor problems that you might encounter and the possible solutions.

Common Symptoms	What You Experience	Possible Solutions
No Video/Power LED off	No picture	ı Ensure that the video cable connecting the monitor and the computer is properly co secure. ı Verify that the power outlet is functioning properly using any other electrical equipm ı Ensure that the power button is depressed fully.
No Video/Power LED on	No picture or no brightness	ı Increase brightness & contrast controls via OSD. ı Perform monitor Self Test Feature Check. ı Check for bent or broken pins in the video cable connector. ı Run the built-in diagnostics.
Poor Focus	Picture is fuzzy, blurry, or ghosting	ı Perform Auto Adjust via OSD. ı Adjust the Phase and Pixel Clock controls via OSD. ı Eliminate video extension cables. ı Reset the monitor to Factory Settings.
Shaky/Jittery Video	Wavy picture or fine movement	ı Perform Auto Adjust via OSD. ı Adjust the Phase and Pixel Clock controls via OSD. ı Reset the monitor to Factory Settings. ı Check environmental factors. ı Relocate the monitor and test in another room.
Missing Pixels	LCD screen has spots	ı Cycle power on-off. ı Pixel that is permanently off is a natural defect that can occur in LCD technology. ı Run the built-in diagnostics.
Stuck-on Pixels	LCD screen has bright spots	ı Cycle power on-off. ı Pixel that is permanently off is a natural defect that can occur in LCD technology. ı Run the built-in diagnostics.
Brightness Problems	Picture too dim or too bright	ı Reset the monitor to Factory Settings. ı Auto Adjust via OSD. ı Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	ı Reset the monitor to Factory Settings. ı Auto Adjust via OSD. ı Adjust brightness & contrast controls via OSD.
Horizontal/Vertical Lines	Screen has one or more lines	ı Reset the monitor to Factory Settings. ı Perform Auto Adjust via OSD. ı Adjust Phase and Pixel Clock controls via OSD.

		• Perform monitor Self Test Feature Check and determine if these lines are also in self • Check for bent or broken pins in the video cable connector.
Synchronization Problems	Screen is scrambled or appears torn	• Reset the monitor to Factory Settings. • Perform Auto Adjust via OSD. • Adjust Phase and Pixel Clock controls via OSD. • Perform monitor Self Test Feature Check to determine if scrambled screen appears i mode. • Check for bent or broken pins in the video cable connector. • Restart the computer in the *safe mode*.
Safety Related Issues	Visible signs of smoke or sparks	• Do not perform any troubleshooting steps. • Contact Dell immediately.
Intermittent Problems	Monitor turns on & off	• Ensure that the video cable connecting the monitor to the computer is connected pr secure. • Reset the monitor to Factory Settings. • Perform monitor Self Test Feature Check to determine if the intermittent problem occ test mode.
Missing Color	Picture lacks color	• Perform monitor Self Test Feature Check. • Ensure that the video cable connecting the monitor to the computer is connected pr secure. • Check for bent or broken pins in the video cable connector.
Wrong Color	Picture color is not good	• Change the color to "User Preset" • Adjust R/G/B value of "User Preset"
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	• Use the Power Management feature to turn off the monitor at all times when not in information, see Power Management Modes). • Alternatively, use a dynamically changing screensaver.

Product-Specific Problems

SPECIFIC SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	• Perform monitor reset on "Factory Reset"
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	• Turn the monitor off and unplug the power cord and then plug back and power on
No Input Signal when user controls pressed	No picture, the LED light is green. When press "+", "-" or "Menu" key, the message " No input signal " will appear.	• Check the signal source. Ensure that the computer is not in power saving by movin or pressing any key on the keyboard. • Check whether the signal cable is plugged in and seated properly. Re-plug the sig necessary. • Re-boot the computer or video player.
The monitor will not fill the entire screen.	The picture does not fill the height or width of the screen.	• Due to the non-standard formats of DVDs, the monitor may not show the full scree

Troubleshooting the Dell™ Soundbar (Optional)

COMMON SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
No Sound	Soundbar has power - power indicator is on.	• Plug the audio line-in cable into the computer's audio out jack. • Set all Windows volume controls to their maximum. • Play some audio content on the computer (i.e., audio CD, or MP3). • Turn the Power/Volume knob on the Soundbar clockwise to a higher volume setting • Clean and reseat the audio line-in plug. • Test the Soundbar using another audio source (i.e., portable CD player).
Distorted Sound	Computer's sound card is used as the audio source.	• Clear any obstructions between the Soundbar and the user. • Confirm that the audio line-in plug is completely inserted into the jack of the sound • Set all Windows volume controls to their midpoints. • Decrease the volume of the audio application. • Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume • Clean and reseat the audio line-in plug. • Troubleshoot the computer's sound card.

		• Test the Soundbar using another audio source (i.e., portable CD player).
Distorted Sound	Other audio source is used.	• Clear any obstructions between the Soundbar and the user. • Confirm that the audio line-in plug is completely inserted into the jack of the audio s • Decrease the volume of the audio source. • Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume • Clean and reseat the audio line-in plug.
Unbalanced Sound Output	Sound from only one side of Soundbar	• Clear any obstructions between the Soundbar and the user. • Confirm that the audio line-in plug is completely inserted into the jack of the sound source. • Set all Windows audio balance controls (L-R) to their midpoints. • Clean and reseat the audio line-in plug. • Troubleshoot the computer's sound card. • Test the Soundbar using another audio source (i.e., portable CD player).
Low Volume	Volume is too low	• Clear any obstructions between the Soundbar and the user. • Turn the Power/Volume knob on the Soundbar clockwise to the maximum volume se • Set all Windows volume controls to their maximum. • Increase the volume of the audio application. • Test the Soundbar using another audio source (i.e., portable CD player).

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